

Notice of Allowability

Application No.

09/267,973

Examiner

Jill M. Gray

Applicant(s)

TURKEVICH ET AL.

Art Unit

1774

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to amendments of August 4, 2003 and October 10, 2003.
2. ☒ The allowed claim(s) is/are 9, 12-16, 23, 50 and 55-70, renumbered 1-24.
3. ☒ The drawings filed on 12 March 1999 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

Election/Restrictions

Claims 50 and 67 are directed to an allowable product. Pursuant to the procedures set forth in the Official Gazette notice dated March 26, 1996 (1184 O.G. 86), claim 23, directed to the process of making or using the patentable product, previously withdrawn from consideration as a result of a restriction requirement, is now subject to being rejoined. Process claim 23 is hereby rejoined and fully examined for patentability under 37 CFR 1.104. Claims, not directed to the process of making or using the patentable product, will not be rejoined.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Kyriakou on September 7, 2004.

The application has been amended as follows:

In the claims:

9. (previously presented) The face mask of claim 50 wherein said thermoplastic polymer fibers comprise multicomponent fibers having two or more components, each of which is comprised of a thermoplastic polymer,
~~wherein at least one component is comprised of a thermoplastic polymer, and~~
wherein ferroelectric material is dispersed within at least one of said components forming said multicomponent fibers at a level of from about 0.01 to about 50 percent by weight of the fiber.

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16. (previously presented) The face mask of Claim 9, in which the multicomponent fiber is a bicomponent meltblown fiber.

Also in claims 9 and 16, line 1, delete "previously presented" and substitute therefor – currently amended--.

23. (*original/rejoined/amended*) A method of preparing electret fibers containing particles of a ferroelectric material the method comprising:

destructuring ~~the~~ a ferroelectric material in the presence of a liquid and a surfactant to give destructured particles, wherein the liquid is a solvent for the surfactant and the surfactant is adapted to stabilize the destructured particles against agglomeration;

forming a blend of the stabilized, destructured ferroelectric material particles and a thermoplastic polymer;

melting the blend of the stabilized, destructured ferroelectric material particles and a thermoplastic polymer; and

melt extruding the molten blend to form fibers;

in which the particles of a ferroelectric material are present at a level of from about 0.01 to about 50 percent by weight, based on the weight of the fiber.

Also in claim 23, line 1, delete "original/rejoined/amended" and substitute therefor – currently amended--.

50. (*amended*) A face mask comprising a nonwoven web of thermoplastic polymer fibers wherein said thermoplastic polymer fibers ~~have comprise a~~ ferroelectric material dispersed therein ~~and further wherein said fibers have been exposed to an electric field in order to reorient the spontaneous polarization of the ferroelectric to form an electret material.~~

Also in claim 50, line 1, change "amended" to –currently amended--.

67. (new) A face mask comprising a nonwoven web of fibers comprising a polyolefin and from about 0.01 weight percent to about 50 weight percent of barium titanate particles based on the weight of the fibers, wherein said barium titanate particles comprise destructureized barium titanate particles and wherein said fibers ~~have been~~ are exposed to an electric field in order to reorient the spontaneous polarization of the barium titanate particles forming an electret material.

64. (previously presented) The face mask of claim 5 57 wherein said nonwoven web comprises a meltblown fiber web.

Also, claim 64, line 1, change "previously presented" to --currently amended--.

Claims 68-69, line 1, change "not entered" to --new--.

Claim 70, line 1, change "not entered" to --new--, and delete "comprise a".

The following is an examiner's statement of reasons for allowance: Applicants arguments of August 4, 2003 have been fully considered and found to be persuasive to overcome the prior art rejection. In particular, the prior art of record does not teach or suggest a face mask comprising a nonwoven web, wherein the nonwoven web comprises thermoplastic fibers having a ferroelectric material dispersed therein and wherein said ferroelectric material has been exposed to an electric field to reorient the polarization of the ferroelectric material and form an electret material.

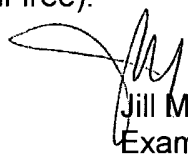
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jill M. Gray whose telephone number is 571-272-1524. The examiner can normally be reached on M-F 10:30-7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye can be reached on 571-272-3186. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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RENA DYE
SUPERVISORY PATENT EXAMINER
A.U. 1774